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November 20, 2009

Aleida Andrino-Chavez City of Albany 1000 San Pablo Avenue Albany, CA 94706

# Subject: Marin Avenue/Santa Fe Avenue Intersection Modification and Traffic Signal Replacement Design

Dear Ms. Andrino-Chavez,

AECOM is pleased to present this proposal to perform civil engineering design services for the reconfiguration of corners and modification of an existing traffic signal at the intersection of Marin Avenue and Santa Fe Avenue in the City of Albany. The following is a proposed scope of work required to prepare construction documents for the installation of these improvements.

The work would be done in the same format as the current design work at the Buchanan Street/Jackson Street intersection. At this time, it is envisioned that the intersection and signal improvements at the Marin/Santa Fe intersection would be constructed under the same construction contract as the ongoing Buchanan/Jackson intersection and signal improvements. Therefore, the design plans for Marin/Santa Fe will be in a separate plan set until the 95% submittal, when they will be combined with the Buchanan/Jackson intersection plans.

# SCOPE OF WORK

# Task 1 – Project Initiation and On-Going Project Management

AECOM will attend a project initiation/kick off meeting to finalize the scope of work, schedule and general approach to accomplishing the required project tasks. Throughout the conduct of the project we anticipate attending up to two additional project meetings. Monthly progress reports and schedules will be submitted to the City documenting project team progress. Attendance at one meeting with the School District and one meeting with the City Traffic and Safety Committee is also included in this task.

# Task 2 – Development and Evaluation of Design Alternatives

Street and Sidewalk plans are required to enhance pedestrian access and safety. The work would consist of the following modifications to the existing street and sidewalk:

# Southwest Corner:

• Elimination of the eastbound right turn lane channelization by removing of the median island ("pork-chop") and installing new curb, gutter, and sidewalk. This will square up the corner to improve pedestrian safety.

# Southeast Corner:

• Installation of new curb, gutter, and sidewalk corner to reduce potential conflicts between northbound right turning vehicles and pedestrians crossing Marin Avenue.

#### Northwest Corner:

• Reconfiguration of curb ramps to match revisions to the northeast and southwest corners



#### Northeast Corner:

 Reconfiguration of sidewalk and curb ramps to improve pedestrian access and match revisions to the southeast corner

Listed below are issues considered for the sidewalk and street improvements at this location:

- The plans will also depict speed humps (1 or 2) to be installed along Santa Fe south of Marin Avenue, along the school frontage;
- Ramp(s) reconfiguration to be ADA compliant will also be included on Santa Fe along the west school frontage;
- Design the proposed sidewalks such that they do not impede truck turning movements at the intersection. The corners will be designed to accommodate fire trucks and buses (AASHTO WB40 and SU design vehicles will be verified);
- Verify that existing drainage facilities are either not impacted, or are accommodated in the design of the new curbs and sidewalks;
- Utility modifications and relocations at the intersection will be kept to a minimum;
- We understand that this is a Safe Routes to Schools Project and the specifications must include all of the special general provisions and bid documents required for this funding as set forth in the Caltrans Local Assistance Program Procedures and Guidelines. Under these procedures the City Engineer must certify that the design meets Caltrans and or City design standards. The Design Engineer must certify to the City Engineer that the design conforms to Caltrans/City design standards.
- The Alameda County Public Works Department Traffic Division will review the plans and provide comments to the City. These comments will be incorporated into the review performed by the City Engineer.

# Task 2A – Existing Data Review

Under this task we will request existing utilities data from service providers that may have facilities within the project area. In addition, we will obtain any improvement plan as-built information the City may have within the project area. We will conduct a site investigation to verify existence of aboveground features, to verify base mapping received, and to identify any other features that may be affected by the proposed project. Any as-built or system data collected during this task will be shown on the project plans.

We anticipate using topographic survey data that is provided by the City. Therefore, this scope assumes that the survey will be adequate for use in this project and no additional topographic survey is included. However, if additional topographic survey field data needs to be obtained, we will prepare a scope and fee to perform these services.

We have assumed that as-built information showing the existing signal equipment including location and types of conduits and the existing signal plan and schedule, is readily available. The design shall be according to and incorporate the State of California Department of Transportation (CALTRANS) 2006 Standard Plans and Specifications and latest edition of the Manual of Uniform Traffic Control Devices.

# Task 2B – Develop Conceptual Reconfiguration Alternatives

Under this task we will develop conceptual design exhibits showing the proposed modifications to the curbs, striping and signal to present to the City and the public before entering formal design. We will develop up to three (3) alternatives to present to the City and the public. Each alternative will be ranked relative to one another on various categories including but not limited to:



- Pedestrian Safety;
- Bicyclist Safety;
- Impacts to Landscaping;
- Vehicle Operations;
- Bicycle Operations; and
- Cost of Implementation.

#### Task 3 – Preparation of Plans, Specifications and Estimate

Once an alternative concept is chosen, AECOM will prepare plans and a construction cost estimate for the installation of curb, sidewalk, and a traffic signal to City standards using AECOM's standard plan format at an estimated scale of 1"=10'. A construction quantity and cost estimate will be prepared at each level of submittal. Submittals will be made to the City for review at the 65%, 95% and 100% stages of design and will include the following plan sheets:

- Title Sheet, Legend, Notes & Abbreviations;
- Existing Utility and Demolition Plan;
- Curb Layout and Improvement Plan;
- Curb Grading, Drainage and Curb Profile Plan;
- Signing and Striping Plan
- Signal Plan
- Signal Schedules;
- Construction Details;

We assume that the curb and striping geometry will be finalized at the 65% review meeting with the City, and that detailed vertical design will be complete at the 95% review level.

Issues for the signal installation include:

- The City desires to limit the amount of open trenches that are installed in this street. Trenchless construction for underground construction is preferred and should be specified whenever practicable. The specifications should specify and require compliance with Caltrans guidelines and specifications for Horizontal Directional Drilling when appropriate.
- The window for construction of this signal will be limited to the summer months when school is out. The design schedule (including right of way) will fit this window.

#### Task 2A. 65% PS&E Submittal

The 65% PS&E Submittal will identify and/or address the following elements:

- Prepare 65% Plans;
- Civil and Electrical Technical Specifications; and
- Civil and Electrical Cost Estimates.

#### Task 2B. 95% PS&E Submittal

The 95% PS&E Submittal will identify and/or address the following elements:

• Prepare 95% Plans for improvements at the Marin/Santa Fe intersection;



- Consolidate 95% plans for the curb bulb-outs and traffic signal at Buchanan Jackson with the improvements at the Marin/Santa Fe intersection;
- Civil and Electrical Technical Specifications; and
- Civil and Electrical Cost Estimates.

# Task 2C. Final Submittal

- Complete final edits based on City design review comments on 95% PS&E. Final plans to be plotted, signed, sealed, and ready for bidding. To include signature block for City Engineer's signature. Submit one complete reproducible set of the final PS&E to the City.
- CD copy of all final files and back up data. Files that are not in electronic format shall be scanned into a commonly used digital format and saved to the CD.

#### Task 4 – Construction Support

Staff will be available to provide whatever engineering services required during construction on a time and materials basis. These services would be authorized by an amendment to the agreement. Construction engineering services will include reviewing submittals and making site visits to verify the location of traffic signal poles, pavement markings, signs and striping conform to the drawings. As part of this work we will furnish a set of as builts (record drawings) on "4 mil mylar" from redlines prepared by the Contractor and a CD containing the digital as built files.

#### BUDGET

We propose to complete the above tasks at an estimated cost of **\$39,585**, as shown in the attached task breakdown estimate.

Yours sincerely,

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Bill Burton Senior Transportation Engineer bill.burton@aecom.com

Attachment

	AECOM								
Santa Fe/Marin Proposed Budget		Name	ill Burton	ennis Belluomini	ieoffrey Rubendall				
AECOM November 20, 2009		Job Title	Principal-In-Charge	Quality Control/Quality Assurance	Senior Transportation Engineer G	CADD/Graphics	Jr Engineer	Administration	Task Totals
	Hourly Billing Rate:		\$275.00	\$170.00	\$120.00	\$110.00	\$100.00	\$75.00	
Task	Task/Subtask Name								
1.0.	Project Initiation and On-Going Project M	lanagem	nent						
1.a	Project Initiation		1		4			2	7
1.b	Ongoing Project Management		1		8			4	
1.b	Meetings		14		24				38
	Subtotal Hours Task 1		16	0	36	0	0	6	58
	Subtotal Labor Task 1		\$4,400	\$0	\$4,320	\$0	\$0	\$450	\$9,170
2.0	.0 Development and Evaluation of Design Alternatives								
2.a	Existing Data Review				6	4	16		26
2.b	Develop Conceptual Alternatives		2	2	20	8	30		62
	Subtotal Hours Task 2		2	2	26	12	46	0	88
	Subtotal Labor Task 2		\$550	\$340	\$3,120	\$1,320	\$4,600	\$0	\$9,930
3.0	Plans, Specifications and Estimate								
3.a	65% PS&E		1	4	36	12	10		63
3.b	95% PS&E		1	2	36	12	10		61
3.c	Final PS&E		1	2	28	6	5		42
3.d									0
	Subtotal Hours Task 3		3	8	100	30	25	0	166
	Subtotal Labor Task 3		\$825	\$1,360	\$12,000	\$3,300	\$2,500	\$0	\$19,985

Total Hours	312			
Base Rate	\$39,085			
Indirect Costs	\$500			
TOTAL	\$39,585			